3D VISUALIZATION OF SIMULATED TROPHIC CASCADES, <u>Christopher E. Wells</u>*, Jeff Horn, Northern Michigan University, Math/Computer Science Department, Marquette, MI 49855, jhorn@nmu.edu

In an ecosystem, organisms may be described as being producers or consumers. These organisms create a hierarchy of dependence, commonly referred to as a "trophic cascade". A specific aquatic ecosystem exists which contains phytoplankton, *Daphnia*, and *Hydra*. Using the **breve** simulation environment, interactions between these organisms are modeled in 3D, allowing the visualization of organismal interaction. Parametric changes made to the organisms and their environment result in changes to the ecosystem as a whole.